

Vibrational spectra of solutions of some derivatives of 1,3,2-dioxastibinane and their structure

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Abstract

1. The vibrational spectra of the 2-chloro and 2-alkoxy derivatives of 1,3,2-dioxastibinane in various phase states indicate they are capable of self-association through Sb-O...Sh and Sb-Cl...Sb bridges of various types, determined by the steric strain in the molecules. 2. In the crystalline phase polymers with strong and weak coordination bonds, dimers, and monomers are formed, depending on the type of substitution in the six-membered ring. In the series of the investigated compounds concentration-dependent signs of a polymer \rightleftharpoons dimer \rightleftharpoons monomer equilibrium are observed in the melts and the solutions. © 1986 Plenum Publishing Corporation.

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